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ABSTRACT

Textual meaning is not autonomous--not only do the meanings of texts change as contexts change but also the textual or sentence meanings change as cultural conventions change. A series of preliminary studies have established that children into the early school years believe that the speaker's intentions, especially when the speaker's belief is false, make their way to the listener even when there is no lexical means for conveying that intention. These studies indicate that children tend to conflate what a speaker means with what the utterance means. With age and schooling they come to see these two "meanings" as independent. Children come to revise their estimate of the meaning intention on the basis of the linguistic or sentence meaning. They begin to treat that textual meaning as autonomous. But what continues to be the case is that the basic distinctions required for literate interpretation continue to be useful for distinguishing between the properties of the text which are "taken as given" for any particular purpose and the set of construals or interpretations that can be made of that text. In learning to distinguish meanings from intentions, and thoughts from expressions, children take the first step on the path which proceeds from taking facts as given and then organizing those facts into some theoretical scheme. (Thirty-eight references and a table of data are attached.) (RS)

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Interpretation and the autonomy of written texts[1]

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The orality literacy hypothesis as developed by Havelock (1982), Goody and Watt (1963), McLuhan (1962) and others (for a summary of recent research under that theme see Olson, 1987) has encouraged a new and promising approach to the problem of the meaning and interpretation of language and text. The argument, in part, is that written discourse invites a new form of producing and interpreting language because it, unlike oral discourse, is typically separated from its author in time and space. A book, a paper or a memo written in Toronto on March 15 (beware the Ides) may be read by someone in Missoula on April 15. Indexicals like "today" and "here" used by the writer will not be shared by the reader. Interpretation, on the readers part will require a reconstruction of the reference of such indexical expressions. We may think of this problem in terms of "decontextualization" and "recontextualization" of written texts. Writers, realizing the autonomy of their texts will either explicate or minimize the unsharable aspects of context in such a way that the appropriate interpretation is more readily reconstructed by the reader. Such procedures help to create a kind of text which is radically different, so the argument goes, from more interactive and contextualized forms of discourse.

Recent writers have pointed out that such autonomous texts are not unique to literate traditions. Narasimhan (in press) points to the fixity of traditional Indian Vedic poetry. Since 600 BC a single standard version of the Rgveda has been preserved and transmitted from generation to generation. The fixity of form is guaranteed by

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ingeneous mnemotechnics which involve various transformations on the text, treating separate words, separate consonants and vowels and the like. Consequently, oral performances of these Vedas in different parts of India are all identical. All without the use of writing as a device to fix text and to serve as a standard for production. Goody (1987, p. 122.) however, has argued that the Vedas "bear all the hallmarks of a literate culture," the suggestion being that the mnemonics invented appear to be based on a written transcript rather than on a memorized text.

Feldman (in press) too, has pointed out that ordinary oral discourse has devices for fixing text in such a way that it can be referred to in subsequent discourse, direct quotation being a clear and simple example. She cites numerous cases of discourse in traditional societies in which the speech of one person becomes the object of a second person's speech. Turning speech into an object of discourse is one means of "freezing" a text. Just what is frozen, the wording or the semantic content or some combination, remains to be seen.

Yet the properties of such "autonomous" texts differ in important ways depending on whether they are created under "oral" conditions or under "literate" conditions. Havelock, building on the original work of Milman Perry, showed how the constraints of human memory shaped oral texts for memorability by recounting the actions and experiences of gods and heroes, and expressing them in a language of formulaic phrases and poetized speech. Havelock was careful to point out that such oral tradition is anything but simple. The Homeric Greek tradition involved a complex literature and a complex social order. But it was framed, as he said, on the memorized word. Goody and Watt (1963) made a similar argument based on their study of contemporary oral myth.

Story telling, also a part of an oral culture, does not involve the construction of "autonomous" texts. Stories have a fixed content but not a fixed verbal form. To be a text in the sense I am using the term requires a fixed verbal formula; the text is fixed, if you like, at the level of surface structure. Ritual speech and poetized speech tend to fit

the definition although both Finnegan (198) and Goody (1987) have pointed out that even ritualized speech in the oral societies they studied retain a certain degree of variability in performance: the same ritual is rarely performed using "the same words". Indeed, the very concept of the same words appears not to be translatable from oral to literate culture.

Thus, while there are both oral and written texts, the structure of such texts differ importantly, the one being based on the properties of oral, verbal memory the other based on recoverability and readability. Indeed, Luria (1976) suggested that with the rise of literacy the organization of memory shifts from associative systems to the categorial systems implicated in definitions, lists and other literate artifacts.

A second contrast between oral and written texts is the particular conception of meaning that each give rise to. In my first attempt at this question (Olson, 1977) I suggested that in oral discourse, the meaning is to be found in the intentions of the speaker whereas in our Western literate tradition, meaning is to be found in the autonomous text quite independently of the intentions of the speaker. This has raised a good deal of controversy and called for some revision. Two basic problems were raised. One is that the distinction is not simply an oral/written one because there are literate cultures which do not treat texts as autonomous, the Moslem culture apparently being one (Scribner and Cole, 1981; Street, 1984). Rather, the claim has to be that in Western literate culture, texts have been exploited in such a way as to institutionalize the idea of the autonomy of texts. In a word, in the dominant Western tradition, texts have come to be treated as objective and autonomous embodiments of meaning. Indeed, a part of the history of the Western tradition could be described as the systematic development of a form of discourse and a species of symbols that could be autonomous, essayist prose, mathematical expressions and computer programs being extreme cases. Perhaps the most renowned exposition of this view is Sir Karl Popper's theory of "objective knowledge" (Popper, 1972.) Such knowledge is tied to or exploits literacy but, of course, literacy did not cause it to happen.

The second problem is that it has been argued by Rommetveit (1988), Nystrand (1986) and others that the whole notion of textual meaning is a mistake. Rommetveit quotes approvingly from Volosinov who says "The fiction of a word's realia promotes .. the reification of its meaning" (p. 23.) That is, the fact that a written or printed word appears to be substantial-- it is permanant in time and space, can be put in one's pocket and so on-- has led us to a misplaced concreteness. We must remember, they point out, that a written word is just a mark on a paper. It has no intrinsic meaning-- it is a convention we have agreed to use "to express a shared meaning". Meaning is, Rommetveit argues, "intertextual," not storable in an object but existing as an agreement between persons. Nystrand argues in a similar way that meaning is between speakers and listeners; language has meaning only because it specifies a relation between speakers and listeners or readers and writers.

Consequently, the tendency prevalent among most literate people to think that a printed mark actually "contains" meaning is a simple error. We are duped, they say, by the concreteness and permanence of the mark. In one sense, I agree we are often seduced by the phenomenal experience of suddenly grasping the meaning of a text into believing that the meaning was there to be grasped all along. Consequently, we as teachers, especially as teachers of beginning readers, may mistakenly believe that if a student fails to recover that meaning, the problem could be remedied by a closer look at the text. Meaning, we sometimes believe, can be recovered by excavation. Indeed, Luther thought so, claiming that the meaning of scripture required not the dogmas of the church but "a deeper reading of the text" (Gadamar, 1975.)

We now acknowledge that Luther was only telling half of the story. One can look at a text forever without seeing its "preferred" meaning. Reading, like observation in science, requires a prepared mind. Boring (1950) pointed out what biologists "saw" when they looked through a microscope at a cell before and after the discovery of the microscope; before, they saw granulated matter, after, they saw chromosomes. Seeing meaning in a text requires the availability of the appropriate set of concepts just as

much as observation in science does. Recent reading theory has done much to drive this point home (Smith, 1971; Anderson, 1977). Reading is not so much recovery as it is recognition.

But Luther was right, I would agree, about the fact that reading is recognition of *structures which are actually there* in the text. Contrary to much of modern reading theory, reading is not guesswork nor is it invention or fabrication or assimilation or hypothesis testing; or problem solving; it is recognition. For an analogy consider the famous Gestalt drawings with hidden figures: those figures are actually there. Discovery in science is not sheer invention; it is seeing nature through or in terms of complex theory. Hansen's (1958) claim that observation is theory-laden means that one needs the theory to see what is there but also that the observation is genuinely the detection of structure.

So I am arguing that the concreteness naively attributed to the written word is not entirely wrong; it is just naive. Structure in a word or a text is in the text but it is detectable only by one who looks at the text with the appropriate background knowledge.

Nor are interactive theories of reading correct on this point. Reading is not an interaction between data driven or bottom-up processes and concept driven or top-down processes. The lowest level structures such as the letter "c" can be recognized only by someone with the requite knowledge. Similarly, the highest level structures, say metaphor, can be recognized only by someone with the requisite knowledge. Both are equally dependent upon the prepared mind and both are equally given in the text. It is a false dichotomy to think that some things are in the world and some are in the mind. The mind, as Gibson (1966) repeatedly argued, is best thought of as attunement to the invariants in the world.

But what is this knowledge? It includes such things as knowledge about the uses of texts in the culture, the issues that a text can adjudicate, birth certificates and land titles for example, and knowledge of who has the authority to interpret a text, priest,

judge or oneself. Vernacular literacy, it may be noted, is important for the access it gives people to the documents and texts that control them. It also includes knowledge about orthography and types of discourse. But it also, and this may be more controversial, it includes knowledge of the meanings of words and sentences independently of the uses to which those meanings are put for the purposes of the speaker or writer. This knowledge may be referred to as "word meaning" or "sentence meaning" and it may be contrasted with the more general "speaker's meaning" or "intended meaning." It is to this knowledge that we now turn.

First, it may be worth acknowledging that knowledge of the meaning of words separate from the use of the word or sentence in expressing a speaker's intention, may not be strictly tied to literacy. Some linguists have argued that understanding a language requires that the speaker possess this knowledge even if the knowledge remains implicit, that is, unavailable as an object of thought or discourse. My suggestion is that literacy, at least Western literacy, has placed a high premium on this knowledge and has made much of it explicit. We have dictionaries, schools, cross-word puzzles, spelling lists, thesauras and SATs. Further, available evidence (Harriman, 1986; Francis, 1988) suggests that such knowledge is acquired when children are five or six years of age, when they first encounter print. Finally, it appears that the acquisition of that knowledge has important cognitive implications. To hint at just one, it is knowledge or awareness of "sentence meaning" which permits writers to revise their texts to bring the sentence meaning into congruity with their intended meaning; conversely, it is that knowledge which permits readers to re-read a text with altered understanding.

Let us now consider children's acquisition of an understanding of the relations between what sentences (or words) mean and what they, as speaker's, mean by them. Note that the claim is not simply that one is in the text and the other in the world. They are both represented by/in the text in a way analogous to that in which both the letters and the words are in the text. The questions are, when does the child detect these two levels of structure and recognize them as distinctive properties, and what role

does literature play in this development?

Texts as autonomous representations of form

When they are very young children begin to treat texts as fixed verbal formulas. Parents frequently report that children will "correct" their reading of a text if it errs in any way from the child's memory of the text. Nancy Torrance, Elizabeth Lee and I have recently documented this observation by systematically inserting "misreadings" into the reading of a well known story. Sixteen children, 2-6 to 3-9 years of age, heard a story six times and on the seventh reading the reader introduced a change in the text: policemen became fireman, brothers and sisters became cousins, and a "clang" became a "crash."

Six of the children showed no sign of awareness of any of these changes. However, 10 of them interrupted the reading, insisting on the correct text. Indeed, another child, not one of the sixteen, insisted that the mother had incorrectly read the text when, in fact, she had read precisely what it said. Presumably it deviated from the child's memory of the text.

Such findings indicate that stories read to children play into their "oral memory" to create notions of fixity of texts. Such written texts then are somewhat analagous to remembered songs, nursery rhymes, jingles with this one difference. The remembered story has its external representation, the marks on the paper in the text.

This understanding is shown in another way. Tom Keenan, Nancy Torrance and I designed simple cartoon drawings with a line of text under each of the drawings. One picture, for example, showed a drawing of Charlie Brown, and under the picture was written the work "Charlie." The picture and the text were identified for the children. Children were then asked a series of questions about the picture: Is this a picture of Charlie Brown? Is this a picture of a little boy? Then they were asked the following about the text: Does this say "Charlie Brown?" Does this say "a little boy?" By the time they were three, most children realized that pictures may be described in more than

one way but that a text, even a text they themselves cannot read, can be read in only one way. The text has a fixed reading.

In their early encounters with fixed texts children are learning an important fact about texts, namely, their autonomy. Their form and meaning are not tied to the occasion of utterance or to the speaker/reader. They are texts, pieces of language, which are objects of recitation, remembering and understanding. It is a curious fact that children are so vulnerability to these texts, and to all early songs and stories, forms of language which, at least at the beginning, lack any meaning or significance. Perhaps Havelock is right in suggesting that we are evolutionarily shaped for attending to and storing away oral texts.

Autonomy of meaning

For a number of years my colleagues and I have been attempting to understand what children take to be the meaning of an utterance or a text. Do they think the meaning is the thing the text refers to? Do they think the meaning is what the speaker or writer intended by the text? Do they grant a certain autonomy to the meaning of a text distinguishing what a text means from what a speaker means by it?

This, of course, is not a straightforward question as it is the very question against which adult philosophers bang their heads. I believe it is fair to say that the three, historically ordered, theories of meaning that are most commonly held are what we may call the "Intentionalist theory," the "Literalist theory," sometimes referred to as the New (new in the 30s) Critisism and the "Reader response theory." My interest here is not in exposing the flaws in these theories but rather in attempting to understand just what children's theories of interpretation are and how they change with the development of literate competence.

Our primary hypothesis has been, and continues to be until we get a better idea, that younger children conflate saying with meaning. Indeed, such conflation should be expected in view of the fact that in our vernacular (I could say "oral") speech, the verb

say has two senses. What one said could be reported by direct quotation or indirect quotation. *Ask* and *tell* are similar in this regard: If someone asked for a glass of water we may report this either directly by saying: He said 'Could I have a glass of water'" or indirectly as his asking for a drink. If someone told us "Get out" we could report this as having been told where to go, and so on.

But it is also important to notice that when we are speaking more "precisely" (I could say "literate"), we would hedge the reports, saying "He didn't actually say" or add "in so many words" and the like to show that we do often distinguish what a speaker actually said, the very words, from what the speaker intended to communicate. Furthermore, we do have lexical items for distinguishing what was said, from what was meant, from what was intended, from how it was interpreted and the like. Control of such distinctions provides a great deal of latitute for talking and thinking about what people mean when they say something (See Olson and Astington, 1989 for a discussion of this issue.)

There is an equally significant piece of the more technical (I could say "literate") lexicon that bears directly on the wording of the text, the locution as Austin (1965) and Feldman (in press) refer to it, that we use to distinguish the meaning of a word or sentence from its use on a particular occasion. When we refer to the meaning of the word "apple" we are discoursing on the word as an autonomous object, quite independently from the particular apples in the fruit bowl in front of us. Some have argued that meaning never comes to be free of reference as did I several years ago (Olson, 1970) but that view now seems to me to be impossible. Some distinction has to be made between the 'sense' of the term and what that term was used to refer to in a particular case (Frege, 1952). Words have analyzable meanings which are just as objective as anything else we have in our socially conventionalized world (cf. human rights.) Whether these objective properties extend to larger units of discourse remains to be seen. The meaning of a poem does seem to be less objective than the meaning of a term.

Even the meaning of a term may not be completely independent of context. Rommetveit (1988) has criticized my view of the "autonomy of meaning" of terms by reexaming one task we have used with children, a story that was first studied by Newman (1982). In this story, Earnie, a Sesame street character, tells his credulous friend Bert "I'm going to divide this banana up so both of us can have some" whereupon he eats the whole banana and gives the skin to Bert. I had argued that in the early school years, children come to realize that "part" has a literal meaning and that, therefore, they would acknowledge that Earnie had not merely lied. His action, literally (I could say "literately") followed from his words. Children have come to understand, I claimed, the autonomy of texts.

Rommetveit argued, on the other hand, that the meaning of "part" is context dependent. *Part* in the discourse on sharing food literally means an edible part; *part* in biology class means any discernable part. The banana skin is a part in the second discourse but not the first discourse. There is no absolute or objectively given "part of an banana." Earnie, regardless of our sympathies as businessmen and advertisers, lied. Rommetveit concluded that we must "concede that we do not (yet) know the ultimate, objective world and have hence to abandon the notion of any literal, basic, invariant and "most-down-to-earth" meaning of *banana*" (p. 30).

I am, of course, reluctant to abandon the notion of the autonomy of meaning of sentences, let alone words. So let us see if there is some way to meet Rommetveit's criticism. First, I believe we may save the idea of the fixity of meaning of the word *banana* or of *part* by noticing that meanings are conventionalized symbols and are not explained by appeal to the referent. Meaning and reference, as I said earlier, are distinguished. Admittedly, the meaning of a term is based on one's knowledge of the referent but also on one's knowledge of the other meanings in the language. The word *part*, for example, has meaning relative to the meaning of the word *whole*, and so on. So one may think of the meaning of the word *part* without thinking about any particular part or part of any particular object.

But I concede to Rommetveit that the meaning of *part* is not independent of discourse. The meaning of *part* in biological discourse is different from its meaning in a sharing discourse. Knowing the meaning depends upon knowing about that form of discourse. Yet within that discourse, say biological discourse, part of an object again has an autonomous meaning. Another example would be the meaning of *proof* in mathematical as opposed to legal discourse.

Here we arrive at the critical point. The meaning of a word or of a piece of discourse depends upon the properties of the discourse and not on the intentions of the speaker. We cannot appeal to what Earnie meant when he said "I'll give you part of the banana". We know exactly what Earnie meant. Earnie meant the skin. But the word *part* in the discourse of sharing means edible part if Rommetveit is right and I believe he is. It is that split between intention and meaning that makes interpretation an interesting problem. Consequently, the central claim stands, the meaning of a word or sentence is autonomous at least in the sense that it is independent of the intentions of the speaker.

It is this point that we have sought to elucidate in our research. The question we have asked is when do children come to distinguish speaker intention from sentence meaning or as we sometimes put it, between speaker's meaning and sentence meaning. And does their coming to make the distinction have any conceptual significance?

From the work of Newman and others we know that when they are around 8 years old, the begin to note that, "technically" (I could say "literally"), Earnie did not lie. They notice some gap between what is actually said and what is intended. In our own work we have been concerned with the beginnings of this understanding and its relation, if any, to becoming literate.

In a typical study, Olson and Torrance (1986) children are told a story about Lucy, Linus and Charlie Brown in which Lucy, wanting her *new* red shoes, asks Linus to bring down her "red" shoes. The problem is that there are two pairs of red shoes in the closet.

Linus, forced to guess, brings the wrong red shoes and Lucy, knowing Lucy, is not grateful. The children are asked a series of questions that pit their understanding of Lucy's intention against the ambiguity of the utterance. The hypothesis is that young children will not distinguish the intention from the meaning and will claim that Lucy not only wanted the new red shoes but also had asked for the new red shoes. Children under six years of age, by and large, make this conflation.

Notice that their difficulty is not that they are literalists. Rather, the opposite. They appear to believe that the sentence is an adequate representation of Lucy's intention; they believe that what Lucy's sentence means is the same thing as what Lucy means by it.

In the last two years, we have attempted to sort out more precisely what is involved here. There were several problems with the tasks we used. Perhaps children did not remember exactly what was said. Indeed, we had frequent cases in which children claimed that Lucy had said "new red shoes" when in fact she said just "red shoes." And whereas we had interpreted this to mean that children conflated sentence and intention others argued that they had simply forgotten the former.

Secondly, Robinson and Whittaker (1987) have recently argued that children's handling of ambiguity could be explained without appealing the the speaker's intention. It may be that children simply agree to any utterance or accept any alternative description as long as it is true of the object. Thus "red shoes" and "new red shoes" are both acceptable as they are both true of the referent. They write: "If there is no relevant discrepancy between the real world object to which a message refers, and the speaker's internal representation of it, then we have no reason to assume that children considered the speaker's internal representation." (p. 23 in mimeo version). Again: "Young children.. ignore the.. speaker having an intention to communicate a particular meaning." (p. 84 in published version.)

The problem is that an ambiguous expression like "red shoes" when there are two

pairs of red shoes is that the child may either think the utterance is about a particular pair of red shoes and base its judgment on that or the child may think the utterance is about the speaker's internal representation of those particular shoes and base its judgment on that. What is needed is some method to pull those alternatives apart.

Perner, Leekam, and Yuille (in preparation) developed an ingenious task to do just that. They did it by distinguishing the belief of the speaker from the object of the utterance by instilling a false belief in the speaker. Children were told an enacted story in which a speaker who was mistaken in his belief about the location of an object, told a second person about the location by means of an ambiguous utterance. If the children take the ambiguous utterance to be a representation of the speaker's intention, they should expect that the listener will come to share the speaker's false belief. If they believe that the ambiguous message is about the intended object, then they should expect the listener to think the utterance refers to the object's true location. Perner et al found that 4 and 6 year old children assumed that the listener would intepret the utterance to mean the location believed by the speaker rather than the true location. They concluded that young children identify the meaning of a message not with its correct interpretation in context but with the intention of the speaker.

This result, however, has been criticized on the basis of the claim that perhaps young subjects do not even notice the message and simply confuse who believes what about the location of the hidden object. For this reason Ruffman, Torrance and I (Ruffman, Olson and Torrance, in preparation) have recently conducted a series of studies on children's understanding of ambiguous utterances using Perner's false belief senario. But first, let me introduce the general form of these experiments.

Children are introduced to sets of objects, typically two red boxes and one green box and an object to be placed in one of the boxes by a puppet who plays the role of the speaker. A second puppet plays the role of a listener. It is about the listener's belief that the child subject is asked. In a typical case, the first puppet places a candy in one

of the red boxes in the absence of the listener. The listener then enters the room and asks the speaker where the candy is. The speaker replies with either an ambiguous utterance "It's in the red box" or an unambiguous utterance "It's in the green box." The child is then asked: "Does the listener puppet know where the candy is?" and "Where does the listener think the candy is? Does he think it is in here (pointing), in here (pointing) or does he think it could be in either?" The order of these questions was counterbalanced.

In the first of these studies we found that children as young as 4 and 1/2 years correctly claimed that the listener would know the object's location when the message was unambiguous and would not know when the message was ambiguous. Below this age, children thought that the listener would know where it was and that the listener would think it was where it really way. This understanding of ambiguity at such an early age was achieved by frequently repeating the critical information, namely that the speaker said "red box" and "there are two red boxes." Nonetheless with such a task it appears that children understand the consequences of ambiguity at least two years earlier than our earlier research had suggested.

But the results to the "think" question are unexpected. Even after insisting that the listener will not know where the candy is, when asked where he will think it is, none of the children say that he thinks it could be in either red box. About half of the children point to the correct red box, the other half to the incorrect red box. There is little indication that they believe that the speaker's belief or the true location would "get through" to the listener. Moreover, even if a child were to go for the correct location it would be unclear whether that child was picking the true location because it was the true location or because the speaker believed it to be there.

Our most recent study, therefore, adopted Perner, Leekham and Yuille's procedure of establishing a false belief in the speaker before the speaker attempts to communicate that belief to the listener by means of an ambiguous message. In this way the truth of

the message and the intention of the speaker can be distinguished. The question, now, is will the child think that the listener will come to acquire the speaker's false belief even if the message is ambiguous?

To this end, a senario was constructed in which the speaker hides a candy in one of the red boxes and then leaves the scene. Children are reminded that the listener did not see him put the candy in a box. Next, with neither the speaker nor the prospective listener present, the child and the Experimenter move the candy to the other red box. Again children are reminded that the speaker and the listener do not know that. Now the speaker and the listener dolls appear and the speaker tells the listener doll that the candy is in the "red box," an ambiguous message. The child is again reminded of exactly what happened and who knows what. Then the child is asked a series of control questions to determine that they remember the details, and then is asked the following critical questions:

- Does the listener know where it is?
- Where does the listener think it is, in here (pointing to one red box), in here (pointing to the other red box) or does he think it could be in either?
- Why does he think it's in there?

First, the know question. As in the preceeding study, almost all of the children correctly say that the listener will not know. Notice that they may be saying the listener does not know for either of two reasons. They may, as in the preceding study, say he does not know because the speaker's message was ambiguous. Or they may be saying he does not know because he now shares the false belief with the speaker. Responses to the "think" question help to sort this out.

Preliminary results for the "think" question are presented in Table 1 for two separate runs of this experiment (in the second run, Experiment 2, children were also asked the question "Where does the speaker think it is? All subjects answered that question correctly). These data make clear that there is an overwhelming tendency for

the children to claim that the listener will think the candy is in the box that the speaker believed it to be in. This suggests that the reason they answer the "know" question the way that they do is that they genuinely believe that the listener has come to hold a false belief. They appear to have ignored the ambiguity altogether when the speaker holds a false belief. Yet when the listener holds a true belief as in the preceding experiment they recognize the consequences of ambiguity.

We are currently collecting data from children in a variety of control conditions. To date we are quite certain that if the speaker's belief is true 5 year olds claim that a listener will know the location if the utterance is unambiguous but not if it is ambiguous. Hence, we know they pay attention to the message. But we also know that if the speaker's belief is false, children believe that the speaker's intention (his belief) will be conveyed even by an ambiguous message just as it will by an unambiguous message. Ruffman has proposed that one final control is needed, one which pits the speaker's belief against the meaning of his message, an arrangement that can be achieved by the speaker lying, and then see what the child infers the listener believes. We expect that the message, if unambiguous, will override the speaker's beliefs.

What do we infer from all this? We believe we have established that children into the school years believe that speaker's intentions, especially when the speaker's belief is false, make their way to the listener even when there is no lexical means for conveying that intention. We take this as evidence for our original hypothesis, namely, that children tend to conflate what a speaker means with what the utterance means. With age and schooling they come to see these two "meanings" as independent.

Another recent study (Torrance, Howes and Olson) suggests that if the speaker's message is in the form of a written text, children are much more likely to notice the ambiguity of the utterance and acknowledge that the listener will have no grounds for any particular belief. Thus, literacy appears to be instrumental in sorting out this distinction although much more work is needed before this conclusion can be stated with

any certainty.

Children's discovery of the autonomy of sentence meaning is critical for a variety of educational tasks. Revision in writing is a matter of bringing the two "meanings" into congruity. When reading shifts from mere assimilation to thinking, it is because of the same factor. Children, in this case, come to revise their estimate of the meaning intention on the basis of the linguistic or sentence meaning. The begin to treat that textual meaning as autonomous.

Now, finally, is textual meaning really autonomous? I would acknowledge that it is not. Texts are always open to re-interpretation as Nystrand has argued in his discussion of legal texts. Not only do their meanings change as contexts change but also the textual or sentence meanings change as cultural conventions change. So there is no absolute meaning of a text. Nor is there one true intention of which a text is a fragmentary expression. But that is the limit of my concession to critics of "autonomy" of text. What continues to seem to me to be the case is that the basic distinctions required for literate interpretation continue to be useful for distinguishing between the properties of the text which are "taken as given" for any particular purpose and the set of construals or interpretations that can be made of that text. The distinction is exactly that between facts and theories. Most of us agree that there is no absolute distinction between facts and theories; today's fact turns out to hide a host of theoretical assumptions. Nonetheless, theoretical science proceeds by "taking as given" a set of facts which can be organized relative to some theoretical scheme. In learning to distinguish meanings from intentions, and thoughts from expressions, children are taking the first giant step in that direction.

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Table 1

Children's Ascriptions of Beliefs to the Listener Doll in False Belief - Ambiguous Condition

		Age			
		4	5	6	Total
Experiment 1:					
	Intended	5	11	18	34
	Actual	1	3	6	10
	Either	0	2	1	3
Experiment 2:					
	Intended	-	4	15	19
	Actual	-	0	3	3
	Either	-	0	0	0

Do they go by what the speaker meant

said

believed